

Exhibit 4

Case IPR2021-00909
U.S. Pat. No. 8,243,593

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLOUDFLARE, INC. AND SONICWALL INC.,
Petitioner,

v.

SABLE NETWORKS, INC.,
Patent Owner

Case IPR2021-00909
Patent 8,243,593

**PATENT OWNER'S RESPONSE
TO PETITION FOR INTER PARTES REVIEW**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. FACTUAL BACKGROUND	4
A. The '593 Patent.....	4
B. References Cited In The Petition.....	8
1. Yung	8
2. Copeland.....	9
3. Four-Steps Whitepaper.....	10
III. DISCLAIMED CLAIMS ARE NOT PART OF THIS PROCEEDING.	11
IV. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT THE CLAIMS CHALLENGED IN GROUND 1 ARE OBVIOUS OVER YUNG (CLAIMS 17, 18, 37, 38, GROUND 1).....	12
V. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT YUNG IN VIEW OF COPELAND DISCLOSES OR RENDERS OBVIOUS THE CALCULATION OF A BADNESS FACTOR AS CLAIMED (CLAIMS 9-13, 19-24, 29-33, 39-44, GROUND 2).	16
A. Copeland Does Not Disclose The Claimed “Badness Factor” For Each Flow.	16
B. The Petition Does Not Sufficiently Establish A Reason For The POSITA To Have Combined Yung And Copeland As Proposed.	24
VI. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT THE FOUR-STEPS WHITEPAPER WAS PUBLICLY ACCESSIBLE QUALIFIED PRIOR ART (CLAIM 3, GROUND 3).....	28
VII. CONCLUSION	45

TABLE OF AUTHORITIES**Page****COURT DECISIONS**

<i>Blue Calypso, LLC v. Groupon, Inc.</i> , 815 F.3d 1331 (Fed. Cir. 2016).....	30
<i>Enzo Biochem, Inc. v. Applera Corp.</i> , 599 F.3d 1325 (Fed. Cir. 2010).....	18
<i>In re Cronyn</i> , 890 F.2d 1158 (Fed. Cir. 1989).....	30, 31
<i>In re Klopfenstein</i> , 380 F.3d 1345 (Fed. Cir. 2004).....	30
<i>In re Magnum Oil Tools Int’l, Ltd.</i> , 829 F.3d 1364 (Fed. Cir. 2016).....	15
<i>PGS Geophysical AS v. Iancu</i> , 891 F.3d 1354 (Fed. Cir. 2018).....	15
<i>Sirona Dental Sys. GMBH v. Institut Straumann AG</i> , 892 F.3d 1349 (Fed. Cir. 2018).....	15
<i>Suffolk Techs., LLC v. AOL Inc.</i> , 752 F.3d 1358 (Fed. Cir. 2014).....	30
<i>Voter Verified, Inc. v. Premier Election Sols., Inc.</i> , 698 F.3d 1374 (Fed. Cir. 2012).....	30

AGENCY DECISIONS

<i>Adobe Sys. Inc. v. Grecia</i> , IPR2018-00418, Paper 7 (June 21, 2018).....	33
---	----

<i>Adobe Sys. Inc. v. Grecia,</i> IPR2018-00418, Paper 9 (Sept. 7, 2018)	33
<i>Adobe Sys. Inc. v. Grecia,</i> IPR2018-00419, Paper 9 (Sept. 7, 2018)	31
<i>Asetek Danmark A/S v. CoolIT Sys., Inc.,</i> IPR2020-00747, Paper 42 (PTAB Sept. 30, 2021)	12
<i>Baker Hughes v. LiquidPower Specialty Prods., Inc.,</i> IPR2016-01903, Paper 74 (PTAB Mar. 8, 2019)	12
<i>Celltrion, LLC v. Biogen, Inc.,</i> IPR2017-01230, Paper 10 (Oct 12, 2017)	31
<i>Coal. for Affordable Drugs VIII, LLC v. Trustees of the Univ. of Pa.,</i> IPR2015-01836, Paper 58 (PTAB Mar. 6, 2017)	35
<i>Elec. Frontier Found. v. Pers. Audio, LLC,</i> IPR2014-00070, Paper 21 (April 18, 2014)	41
<i>Facebook, Inc. v. Sound View Innovations, LLC,</i> IPR2017-00985, Paper 17 (Sep. 5, 2017), <i>reh'g denied</i> , Paper 30, 10 (PTAB Oct. 19, 2017)	18
<i>Google LLC v. IPA Techs. Inc.,</i> IPR2018-00384, Paper 11 (July 3, 2018)	31, 32, 33, 40
<i>Gracenote, Inc. v. Iceberg Indus. LLC,</i> IPR2013-00551, Paper 6 (Feb. 28, 2014)	29
<i>IBM Corp. v. Rigetti & Co., Inc.,</i> IPR2020-00494, Paper 13 (Aug. 11, 2020)	15
<i>Intel Corp. v. Parkervision, Inc.,</i> IPR2020-01302, Paper 35 (PTAB Jan. 21, 2022)	12
<i>Intel Corp. v. VLSI Tech. LLC,</i> IPR2018-01040, Paper 36 (PTAB Feb. 12, 2020)	12
<i>Kinetic Techs., Inc. v. Skyworks Sols., Inc.,</i> IPR2014-00529, Paper 8 (Sept. 23, 2014)	20

<i>Kingston Tech. Co., Inc. v. Memory Techs., LLC</i> , IPR2019-00654, Paper 9 (Aug. 13, 2019)	31, 32
<i>Laird Techs., Inc. v. A.K. Stamping Co. Inc.</i> , IPR2017-02038, Paper 6 (Mar. 14, 2018).....	34, 35
<i>OpenSky Indus., LLC v. VLSI Techn. LLC</i> , IPR2021-01064, Paper 17 (Dec. 23, 2021).....	36
<i>Power Integrations, Inc. v. Semiconductor Components Indus., LLC</i> , IPR2017-01975, Paper 9 (Mar. 12, 2018).....	42
<i>Schlumberger Tech. Corp. v. Integrated Drive Sys. LLC</i> , IPR2018-00603, Paper 40 (PTAB Sept. 3, 2019).....	29, 41
<i>Shenzhen Zhiyi Tech. Co. v. iRobot Corp.</i> , IPR2017-02133, Paper 8 (Mar. 28, 2018).....	34, 39
<i>Unified Patents Inc. v. Uniloc 2017 LLC</i> , IPR2019-00480, Paper 10 (Aug. 16, 2019)	20

STATUTES

35 U.S.C. § 102(e)	11
35 U.S.C. § 253(a)	11
35 U.S.C. § 311(b)	29
35 U.S.C. § 316(e)	29

REGULATIONS

37 C.F.R. § 1.321(a).....	11
37 C.F.R. § 42.104(b)(4).....	19
37 C.F.R. § 42.107(e).....	11

RULES

Fed. R. Evid. 802(a)	37, 38
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OTHER AUTHORITIES

77 Fed. Reg. 48,680 (Aug. 14, 2012)	11
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2002	Email from Jun Zheng, U.S. District Court for Western District of Texas staff, to counsel for parties, with Subject “Sable Networks, Inc., et al. v. Riverbed Technology, Inc., No. 6:21-cv-00175-ADA and Sable Networks, Inc., et al. v. Cloudflare, Inc., No. 6:21-cv-00261-ADA – Request for Telephone Conference” (Aug. 20, 2021, 9:04 am)
2003	Scheduling Order, Dkt. 21, <i>Sable Networks, Inc., et al. v. Cloudflare, Inc.</i> , No. 6:21-cv-00261-ADA (June 24, 2021)
2004	Declaration of Daniel P. Hipskind in Support of Motion for <i>Pro Hac Vice</i> Admission
2005	Declaration of Erin McCracken in Support of Motion for <i>Pro Hac Vice</i> Admission
2006	March 4, 2022 Disclaimer in U.S. Patent No. 8,243,593 Under 37 C.F.R. §1.321(a)
2007	Deposition Transcript of Kevin Jeffay, Ph.D. [Jeffay Transcript]
2008	Declaration of Erin McCracken [McCracken Declaration]
2009	Cloudflare, Inc. Opening Claim Construction Brief, Dkt. 29, <i>Sable Networks, Inc., et al. v. Cloudflare, Inc.</i> , No. 6:21-cv-00261-ADA (Nov. 12, 2021) [Cloudflare Opening Claim Construction Brief]

I. INTRODUCTION

The grounds raised in the Petition should be rejected because Petitioner fails to demonstrate by a preponderance of the evidence that the challenged claims¹ are unpatentable.

The Petition raises grounds 1, 2, and 3,² each of which fails. *First*, as to ground 1, alleged obvious over Yung alone, the Petition fails to show that claims 17, 18, 37, and 38 of the '593 patent are taught or suggested by Yung. As the Board already stated in the Institution Decision, “Petitioner has not demonstrated a reasonable likelihood it would prevail in establishing the unpatentability of any of dependent claims 17, 18, 37, or 38 as obvious over Yung alone.” Institution Decision, 38 (citing Pet., 1 (table of grounds) and 42-43 (addressing these independent claims)). These dependent claims depend from independent claims

¹ As explained below, to streamline this proceeding, Patent Owner has filed a statutory disclaimer of originally challenged claims 1, 2, 4-8, 14-16, 25-28, and 34-36. Claims 3, 9-13, 17-24, 29-33, and 37-44 remain at trial, challenged by one or more of grounds 1, 2 or 3. *See infra* § III.

² Ground 4 of the Petition is now moot, as no claims presently in the '593 patent are challenged under that ground. *See infra* § III.

that each recite computing a “badness factor for the flow, wherein the badness factor provides an indication of whether the flow is exhibiting undesirable behavior.” Ex. 1001 [’593 Patent] 9.2; 29.2. As Petitioner concedes, and the Board confirmed, Yung does not teach or suggest the claimed “badness factor.” Pet., 49; Institution Decision, 38.

Second, as to ground 2 of the petition, alleged obviousness of claims 9–13, 19–24, 29–33, and 39–44 over Yung and Copeland, Petitioner fails to show by a preponderance of evidence that Copeland and Yung teach the calculation of a “badness factor” for each flow as recited in the claims. Every challenged claim in ground 2 includes the limitations associated with computing this “badness factor.” The Petition concedes that Yung does not disclose these “badness factor” limitations, relying on Copeland to try to fill this gap and asserting that Copeland’s “flow-based ‘concern index’ (or CI) value represents the claimed badness factor.” *Id.* (citing Ex. 1003 [Jeffay Decl.] ¶ 210). But the only supposed support for this contention is the conclusory testimony of Dr. Jeffay, Petitioner’s technical opinion declarant. And at deposition Dr. Jeffay testified that he could not articulate what the term “badness factor” means. At the same time, he stated that whatever it means, even though he could not articulate what it means, Copeland would fit that meaning. This sort of untestable, and indeed impenetrable, opinion testimony is entitled to no weight for showing alleged unpatentability. As such, Petitioner has

failed to carry its burden of establishing at trial by a preponderance of the evidence that Copeland, alone or in combination, renders obvious the claims challenged in ground 2. Moreover, in any event, Petitioner also fails to establish that the ordinary artisan in the art at the time of the invention would have been motivated to combine Yung and Copeland to meet the claims challenged this ground. *See infra* § V.B.

Third, ground 3, which challenges only independent claim 3, fails at least because Petitioner has not carried its burden to establish by a preponderance at trial that the Four-Steps Whitepaper was publicly available as printed publication prior art at the time of the invention. In the Institution Decision, the Board correctly “question[ed] whether Petitioner introduced sufficient evidence to show that an ordinary artisan would have been able to locate the Four-Steps Whitepaper with reasonable diligence.” Institution Decision, 50. Among other things, as the Board explained, “even if we assume that an ordinary artisan was aware of the company (Packeteer) and its website,” an assumption Patent Owner refutes below, “we query whether the Petition sufficiently shows that an ordinary artisan would have been able to locate the Four-Steps Whitepaper on that website with reasonable diligence.” *Id.* at 51. Petitioner knew full well that it had to show that any alleged prior art on which it relies was available as a prior art patent or printed publication. Yet Petitioner has put forth **no** evidence showing that the ordinary artisan at the

time would have been able to locate the Four-Steps Whitepaper on the Packeteer website. Nothing has changed, and with Patent Owner's right to introduce evidence now closed, it is far too late for Petitioner to now attempt to introduce its first such evidence. Petitioner has therefore fallen far short of its burden to prove the public accessibility of the Four-Steps Whitepaper. That is fatal to ground 3.

This Response is timely pursuant to the parties' stipulation. Paper 22.

For at least these and other reasons provided herein, Patent Owner respectfully requests that the Board deny the Petition and confirm the patentability of the claims.

II. FACTUAL BACKGROUND

To assist the Board in a correct understanding of the prior art and the claimed invention, this Section briefly describes certain background facts of the patent and the petitioned art references.

A. The '593 Patent

U.S. Patent No. 8,243,593, entitled *Mechanism for Identifying and Penalizing Misbehaving Flows in a Network*, was filed on December 22, 2004. Ex. 1001. The '593 patent is subject to a 35 U.S.C. § 154(b) term extension of 1,098 days.

The original assignee was Caspian Networks, Inc. Dr. Lawrence G. Roberts—one of the founding fathers of the Internet, best known for his work as

the Chief Scientist of the Advanced Research Projects Agency (ARPA) where he designed and oversaw the implementation of ARPANET, the precursor to the internet—founded Caspian Networks in 1998. At Caspian Networks, Dr. Roberts developed a new kind of internet router to efficiently route packets over a network, which was aimed at addressing concerns about network “gridlock.” Further development work at Caspian led to, among other inventions, the patent-at-issue in this proceeding. In a 2001 interview with *Wired* Magazine, for example, Dr. Roberts discussed the router he was then developing at Caspian Networks—the Apeiro. He told *Wired*:

the Apeiro will... create new revenue streams for the carriers by solving the ‘voice and video problem.’ IP voice and video, unlike email and static Web pages, breaks down dramatically if there’s a delay - as little as a few milliseconds - in getting packets from host to recipient.”

Ex. 2001.³ The Apeiro debuted in 2003.

At its height, Caspian Networks, Inc. raised more than \$300 million and grew to more than 320 employees in the pursuit of developing and commercializing Dr. Roberts’ groundbreaking networking technologies. Despite

³ John McHugh, *The n-Dimensional Superswitch*, WIRED MAGAZINE (May 1, 2001).

early success with its technology, Caspian's business ran into shoals when the telecommunications bubble burst. The legacy of the work at Caspian continues to exist, however, in the form of the inventions that were created and patented in the process.

Sable Networks, Inc., the current assignee, was formed by Dr. Sang Hwa Lee to further develop and commercialize the flow-based networking technologies developed by Dr. Roberts and his team members at Caspian Networks. Sable Networks, Inc. has continued its product development efforts based on the patented technology and has gained commercial success with customers in Japan, South Korea, and China. Customers of Sable Networks, Inc. have included: SK Telecom, NTT Bizlink, Hanaro Telecom, Dacom Corporation, USEN Corporation, Korea Telecom, China Unicom, China Telecom, and China Tietong. The '593 patent is one of several Caspian Networks patents now assigned to Sable Networks, Inc.

The '593 patent discloses and claims novel methods and systems for processing a flow of a series of information packets on a single router. These technologies permit a single router to identify and control less desirable network traffic. Because the characteristics of data packets in undesirable network traffic can sometimes be disguised, the '593 patent improves the operation of computer networks by disclosing technologies that can pierce such a disguise by monitoring

the characteristics of flows of data packets rather than ancillary factors such as port numbers or signatures.

As the '593 patent explains, “[w]ith the advent of file sharing applications such as KaZaA, Gnutella, BearShare, and Winny, the amount of peer-to-peer (P2P) traffic on the Internet has grown immensely in recent years. ... This is so despite the fact that the number of P2P users is quite small compared to the number of non P2P users. For this and other reasons, P2P traffic is viewed by ISP’s (Internet service providers) and others as being abusive/misbehaving traffic that should be controlled and penalized.” Ex. 1001 [’593 Patent] 1:7-18. The ’593 patent recognizes that to control misbehaving traffic such as P2P traffic, it must be identified. *Id.* at 1:19-20. At the time, “P2P protocols ha[d] gotten quite sophisticated,” making it more difficult to identify misbehaving traffic. *Id.* at 1:46-49.

The ’593 patent is directed toward “a mechanism for effectively identifying and penalizing misbehaving information packet flows in a network. This mechanism may be applied to any type of network traffic including, but certainly not limited to, P2P traffic.” *Id.* at 1:54-58. “Because misbehaving flows are identified based upon their observed behavior, and because their behavior cannot be hidden, misbehaving flows cannot avoid detection.” *Id.* at 1:61-64.

The '593 patent discloses tracking the behavioral statistics of a flow of data packets that can be used to determine whether the flow is undesirable. “These behavioral statistics reflect the empirical behavior of the flow.” *Id.* at 2:4-5. The behavioral statistics are updated as information packets belonging to the flow are processed by a single router. *Id.* at 2:14-17. Based at least in part on the behavioral statistics, “a determination is made as to whether the flow is exhibiting undesirable behavior.” *Id.* at 2:18-20. This determination is made by calculating a “badness factor” for each flow, which is computed based on the flow’s behavioral characteristics. *Id.* at 2:21-23. “If the flow is exhibiting undesirable behavior, then a penalty may be enforced on the flow.... This penalty may be an increased drop rate.” *Id.* at 2:28-31. In one embodiment, for example, enforcing the penalty on a flow rehabilitates the flow by causing its badness factor to improve. *Id.* at 2:42-45. “Once the flow is no longer misbehaving, it is no longer subject to penalty. In this manner, a misbehaving flow can be identified, penalized, and even rehabilitated” *Id.* at 2:47-50.

B. References Cited In The Petition

1. Yung

U.S. Patent No. 7,664,048 to Yung et al., is entitled *Heuristic Behavior Pattern Matching of Data Flows in Enhanced Network Traffic Classification*. Ex. 1005 (“Yung”).

Yung is Petitioner's primary cited reference, relied on under 35 U.S.C. § 102(e) with respect to all three grounds remaining in the Petition. In ground 1, Yung is the sole reference. The only claims challenged in ground 1 that have not been disclaimed are claims 17, 18, 37, and 38. *See infra* § III. In the Institution Decision, the Board correctly concluded that "Petitioner has not demonstrated a reasonable likelihood it would prevail in establishing the unpatentability of any of dependent claims 17, 18, 37, or 38 as obvious over Yung alone." Institution Decision, 38 (citing Pet., 1 (table of grounds) and 42-43 (addressing these independent claims)). Because claims 17, 18, 37, and 38 are the only remaining challenged claims in ground 1 and Yung is ground 1's only alleged prior art, ground 1 fails and cannot invalidate claims 17, 18, 37, and 38.

2. Copeland

U.S. Patent No. 7,185,368 to Copeland is entitled *Flow-Based Detection of Network Intrusions*. Ex. 1007 ("Copeland"). Copeland is relied on by Petitioner as a secondary reference in combination with Yung as alleged prior art under 35 U.S.C. § 102(e) in ground 2 of the Petition.

Copeland teaches "an intrusion detection system that inspects all inbound and outbound network activity and identifies suspicious patterns that may indicate a network system attack or intrusion." Ex. 1007 [Copeland] 1:45-48. Because Yung concededly does not disclose calculating a "badness factor" for each flow as

claimed, Petitioner relies on Copeland in combination with Yung to supposedly supply this missing limitation. Pet., 49-51. Petitioner alleges that Copeland's "concern index" discloses the '593 patent's "badness factor." *Id.* But given that Petitioner's expert testified at his deposition that he cannot even say what the term "badness factor" means, as explained in Section V.A. below, it is illogical for Petitioner to rely on his testimony as its sole alleged evidence for its allegation that Copeland discloses this limitation, and in fact Petitioner fails to show that it does.

Notably, Copeland's "concern index" is for "suspicious activity" in contrast to legitimate traffic. Ex. 1007 [Copeland] Abstract. By way of comparison, the '593 patent's "badness factor" is concerned with "undesirable" behavior or "misbehavior" associated with P2P traffic which is not necessarily suspicious behavior. Ex. 1001 ['593 Patent] 1:10-18. *See supra* § II.A; *infra* V.A.

3. Four-Steps Whitepaper

Exhibit 1006 is a paper entitled "Four Steps to Application Performance Across the Network with Packeteer's PacketShaper®" (the "Four-Steps Whitepaper"). This secondary reference is relied on by Petitioner as alleged prior art under 35 U.S.C. § 102(e) in combination with Yung with respect to ground 3.

As the Board preliminarily found and as explained in detail below, Petitioner has not shown by the requisite preponderance of the evidence that the Four-Steps

Whitepaper was publicly available so as to qualify as a “printed publication” under 35 U.S.C. § 102(e). *See infra* § VI.

III. DISCLAIMED CLAIMS ARE NOT PART OF THIS PROCEEDING.

To streamline this proceeding, Patent Owner elected to disclaim challenged claims 1, 2, 4-8, 14-16, 25-28, and 34-36 of the ’593 patent. These claims are not being asserted in the co-pending litigation. In compliance with 37 C.F.R.

§ 1.321(a), Patent Owner has filed a statutory disclaimer under 35 U.S.C. § 253(a) of claims 1, 2, 4-8, 14-16, 25-28, and 34-36 (the “Disclaimed Claims”). Ex. 2006.

See 77 Fed. Reg. 48,680, 48,689 (Aug. 14, 2012) (codified at 37 C.F.R.

§ 42.107(e)). This disclaimer was filed only to streamline the proceeding and Patent Owner does not request adverse judgment on the disclaimed claims. As a matter of law, claims 1, 2, 4-8, 14-16, 25-28, and 34-36, should be treated as though they never existed:

The Federal Circuit has held that claims disclaimed under § 253(a) should be treated as though they never existed. *See Vectra Fitness, Inc. v. TNWK Corp.*, 162 F.3d 1379, 1383 (Fed. Cir. 1998) (“This court has interpreted the term ‘considered as part of the original patent’ in section 253 to mean that the patent is treated as though the disclaimed claims never existed.”); *Guinn v. Kopf*, 96 F.3d 1419, 1422 (Fed. Cir. 1996) (“A statutory disclaimer under 35 U.S.C. § 253 has the effect of canceling the claims from the patent and the patent is viewed as though the disclaimed claims had never existed in the patent.”); *see also*

Genetics Inst., LLC v. Novartis Vaccines & Diagnostics, Inc., 655 F.3d 1291, 1299 (Fed. Cir. 2011) (holding that the Board’s interference jurisdiction under 35 U.S.C. § 291 required “the existence of an interference, and a claim that ‘never existed’ [due to a statutory disclaimer] cannot form the basis for an interference”).

Baker Hughes v. LiquidPower Specialty Prods., Inc., IPR2016-01903, Paper 74, 11-12 (PTAB Mar. 8, 2019); *see Intel Corp. v. VLSI Tech. LLC*, IPR2018-01040, Paper 36, 16 (PTAB Feb. 12, 2020) (similar).

Accordingly, claims 1, 2, 4-8, 14-16, 25-28, and 34-36 of the ’593 patent are “no longer part of this proceeding.” *Intel Corp. v. Parkervision, Inc.*, IPR2020-01302, Paper 35, at 2 (PTAB Jan. 21, 2022) (final written decision explaining that claims the patent owner disclaimed following institution of *inter partes* review were no longer part of the proceeding). *See also Asetek Danmark A/S v. CoolIT Sys., Inc.*, IPR2020-00747, Paper 42, 6 (PTAB Sept. 30, 2021) (determining that a statutory disclaimer removed a disclaimed claim from an *inter partes* review proceeding). Claims 1, 2, 4-7, and 25-27 are therefore eliminated from ground 1 of the Petition. Because claims 8, 14-16, 28, and 34-36 are the only claims subject to ground 4 of the Petition, and are all disclaimed, ground 4 is now moot.

IV. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT THE CLAIMS CHALLENGED IN GROUND 1 ARE OBVIOUS OVER YUNG (CLAIMS 17, 18, 37, 38, GROUND 1).

In the Institution Decision, the Board correctly concluded that “Petitioner has not demonstrated a reasonable likelihood it would prevail in establishing the unpatentability of any of dependent claims 17, 18, 37, or 38 as obvious over Yung alone.”⁴ Institution Decision, 38 (citing Pet., 1 (table of grounds) and 42-43 (addressing these independent claims)). As the Board explained, “claims 17 and 18 both depend indirectly from independent claim 9 ... , and claims 37 and 38 depend indirectly from independent claim 29.” *Id.* (citing Ex. 1001 [’593 Patent]). Independent claims 9 and 29 each recite computing a “badness factor for the flow, wherein the badness factor provides an indication of whether the flow is exhibiting undesirable behavior.” Ex. 1001 [’593 Patent] 9.2; 29.2. The Petition concedes that Yung does not disclose these “badness factor” limitations. Pet., 49. Yet, the only ground challenging dependent claims 17, 18, 37, and 38 is ground 1 of the Petition. Pet., 1, 42-43 (alleging that “Yung discloses claims 17 and 37”; “Yung discloses claims 18 and 38”). And ground 1 is based on Yung alone. *Id.*

As a result, the Board concluded that “Petitioner does not demonstrate that Yung teaches or suggests ‘computing . . . a badness factor for the flow,’ as required

⁴ As explained above, with respect to ground 1, other than claims 17, 18, 37, and 38, the challenged claims have been statutorily disclaimed.

by claim 9, or ‘means for computing . . . a badness factor for the flow,’ as required by claim 29.” Institution Decision, 38-39 (citations omitted). “Thus, Petitioner does not demonstrate that Yung teaches or suggests all limitations of dependent claims 17, 18, 37, and 38.” *Id.*, 39. The Board was correct, and its analysis must and should end there. Because Yung does not teach or suggest all limitations of dependent claims 17, 18, 37, or 38 of the ’593 patent, and Yung is the only basis for ground 1 of the Petition, Petitioner has failed to carry its burden of proving by a preponderance of the evidence that dependent claims 17, 18, 37, and 38 are obvious in view of Yung.

Despite the Petition’s clear failure to prove the obviousness of claims 17, 18, 37, and 38 of the ’593 patent in view of Yung, the Institution Decision continues on to speculate that perhaps “the inclusion of claims 17, 18, 37, and 38 in the Yung-only ground may be a typographical error” even though there is no evidence of any such alleged error. Institution Decision, 39. The Board should not further consider such a suggestion, and should not so find, as it would violate well established Federal Circuit precedent. Even if the Board were to conclude, contrary to the lack of evidence supporting such a conclusion, that Petitioner intended to challenge claims 17, 18, 37, and 38 under ground 2, but inadvertently failed to state such anywhere in the petition, this would be a clear example of a deficiency in the petition that the Supreme Court, the Federal Circuit, and the

Board have repeatedly made clear the Board is not empowered to correct. The Federal Circuit and Board have repeatedly overruled prior decisions to the contrary.

The Federal Circuit has explained, “the petitioner’s petition ... is supposed to guide the life of the litigation,” and the “petitioner’s contentions . . . define the scope of the litigation all the way from institution through to conclusion.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018). Accordingly, in *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016), the Federal Circuit found that the Board erred in making an obviousness argument on behalf of the petitioner that could have been, but was not, made in the petition. The Federal Circuit concluded that there is no support for the argument that “the Board is free to adopt arguments on behalf of petitioners that could have been, but were not, raised by the petitioner during an IPR.” *Id.* at 1381. The Board must apply the Federal Circuit’s precedent in this regard, and should do the same here. *See, e.g., IBM Corp. v. Rigetti & Co., Inc.*, IPR2020-00494, Paper 13 at 34 (Aug. 11, 2020) (decision denying institution of *inter partes* review and explaining “our role is not to remedy the deficiencies in Petitions that fall short”) (citing *Sirona Dental Sys. GMBH v. Institut Straumann AG*, 892 F.3d 1349, 1356 (Fed. Cir. 2018) (“It would ... not be proper for the Board to deviate from the grounds in the

petition and raise its own obviousness theory,” “institut[ing] a *different* inter partes review of [its] own design”) (emphasis in original)).

Accordingly, the Petition must and should be taken at its word, just as any filing by any party in this case should be taken at its word. Claims 17, 18, 37, and 38 are challenged in ground 1, and ground 1 fails as to those claims.

Moreover, any new evidence or argument raised by Petitioner for the first time on Reply seeking to challenge claims 17, 18, 37, and 38 under any other grounds, such as ground 2, that could have been, but were not, raised in the Petition should not be considered. Doing so would constitute a clear error of law.⁵

V. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT YUNG IN VIEW OF COPELAND DISCLOSES OR RENDERS OBVIOUS THE CALCULATION OF A BADNESS FACTOR AS CLAIMED (CLAIMS 9-13, 19-24, 29-33, 39-44, GROUND 2).

A. Copeland Does Not Disclose The Claimed “Badness Factor” For Each Flow.

⁵ In any event, as explained directly below in Section V.A, Copeland does not disclose the claimed “badness factor” limitations. For at least this reason, even had the Petition challenged claims 17, 18, 37, or 38 under ground 2, that ground would have to be rejected on the merits as to those claims. Nevertheless, the Board may not, and should not, correct such deficiencies in the Petition.

Independent claims 9 and 29 each recite computing a “badness factor for the flow, wherein the badness factor provides an indication of whether the flow is exhibiting undesirable behavior.” [9.2; 29.2]. Every challenged claim in ground 2 includes the limitations associated with computing this “badness factor.”

The Petition concedes that Yung does not disclose these “badness factor” limitations. Pet., 49. The Petition relies on Copeland to try to fill this gap. *See id.*

The Petition asserts that Copeland’s “flow-based ‘concern index’ (or CI) value represents the claimed badness factor.” *Id.* (citing Ex. 1003 [Jeffay Decl.] ¶ 210). As alleged support for this assertion, the Petition cites no evidence except *ipse dixit* in the accompanying declaration, which asserts: “This concern index (CI) value represents the claimed *badness factor*.” Ex. 1003 [Jeffay Decl.] ¶ 210. The Petition fails to substantiate this assertion. And the deposition testimony of Petitioner’s expert confirms that this is so.

Although Patent Owner recognizes the Board preliminarily found in the Institution Decision, under the low “reasonable likelihood” standard applicable prior to institution, that “Petitioner has sufficiently shown that Copeland’s concern index qualifies as a ‘badness factor’ that ‘provides an indication of whether the flow is exhibiting undesirable behavior,’ as required by claim 9,” Patent Owner respectfully disagrees, and in any event Petitioner has not shown this under the

heightened preponderance standard applicable to institution, for at least the following reasons.

To start, in the parallel district court proceeding, Petitioner is seeking a construction that the term “badness factor” **is indefinite**. *See* Ex. 2009 [Cloudflare’s Opening Claim Construction Brief] 28-32. According to Petitioner, the term is “highly subjective” and not “a term of art.” *Id.* at 29. Yet, at the same time, Petitioner argues that the challenged claims containing “badness factor” limitations are rendered obvious, and Petitioner purports to map Copeland against the ’593 patent’s “badness factor.” *See* Pet., 49-51. However, Petitioner cannot maintain that a claim is both indefinite and rendered obvious. *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010) (“As a preliminary matter, we observe that a claim cannot be both indefinite and anticipated.”); *see also Facebook, Inc. v. Sound View Innovations, LLC*, IPR2017-00985, Paper 17, 13-14 (Sep. 5, 2017) (denying institution, refusing to analyze unpatentability ground when petitioner simultaneously and “unambiguous[ly]” took different and “inconsistent” positions on construction and definiteness of challenged claims in IPR and court under same claim construction standard), *reh’g denied*, Paper 30, 10 (Oct. 19, 2017) (refusing to accept petitioner’s position that it may “*simultaneously* argue *different* claim constructions under the *same* claim construction standard to the U.S. district court and to us, *without explanation*”) (emphases by Board).

Therefore, the Petition does not “set forth ... where each element of the claim is found in the prior art ... relied upon.” 37 C.F.R. § 42.104(b)(4).

Indeed, although Petitioner’s expert makes the *ipse dixit* assertion that Copeland’s “concern index (CI) value represents the claimed *badness factor*,” (Ex. 1003 [Jeffay Decl.] ¶ 210), at his deposition, he testified that “a person of ordinary skill in the art would not recognize badness factor as a term of art. And I think – reading the ’593 patent, I don’t think they would understand what the bounds of the term mean.” Ex. 2007 [Jeffay Transcript] 35:17-36:7. Even though Dr. Jeffay opines that the ordinary artisan would not understand the term “badness factor,” a position consistent, of course, with Petitioner’s claim construction position in the district court litigation, he nonetheless claims that “a person of ordinary skill in the art would understand that ***whatever a badness factor is***, Copeland’s recitation of what it refers to as suspicious activity ... would certainly qualify as a badness factor.” *Id.* at 35:17-36:15 (emphasis added). In other words, on this issue, Dr. Jeffay is nothing more than a mouthpiece for Petitioner’s contradictory positions taken here and in the district court proceeding, without a meaningful explanation of those contradictions. *Compare* Pet., 49 (“This flow-based ‘concern index’ (or CI) value represents the claimed *badness factor*”) with Ex. 1003 [Jeffay Decl.] ¶ 210 (“This concern index (CI) value represents the claimed *badness factor*.”). Dr. Jeffay’s testimony on this issue is entitled to no weight here. *See Kinetic Techs.*,

Inc. v. Skyworks Sols., Inc., IPR2014-00529, Paper 8, 15 (Sept. 23, 2014) (“Merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.”). That is true regardless whether Dr. Jeffay’s regurgitation of Petitioner’s attorney argument is rebutted by counter testimony from another declarant; it is simply not entitled to appreciable weight. *See, e.g., Unified Patents Inc. v. Uniloc 2017 LLC*, IPR2019-00480, Paper 10, 3 (Aug. 16, 2019) (“Just because an expert regurgitates attorney argument does not make the argument either persuasive or worthy of blind acceptance when counter testimony does not exist.”). Without any support for the contention that Copeland’s concern index teaches or suggests the claimed badness factor, Petitioner has failed to carry its burden with respect to ground 2.

Moreover, any suggestion that may be gleaned from Dr. Jeffay’s nonexplanatory testimony, or the Petition’s nonexplanatory assertion, that Copeland’s concern index somehow is the same as or teaches the claimed invention’s “badness factor” has not been shown to have any support in the reference disclosures. Copeland’s concern index is for “suspicious activity” in contrast to legitimate traffic. Ex. 1007 [Copeland] Abstract. Copeland teaches that “flow statistics are analyzed to determine if the flow appears to be legitimate traffic or possible suspicious activity. *A concern index value is assigned to each flow that appears suspicious.*” *Id.* (emphasis added). Copeland’s concern index is thus

concerned with identifying malicious activity such as an external intruder. This point is in keeping with Copeland’s teachings as a whole, which describe “an intrusion detection system that ... identifies suspicious patterns that may indicate a network attack or system attack or intrusion.” *Id.* at 1:45-48; *see also id.* at Abstract (“By assigning a value to each flow that appears suspicious and adding that value to the total concern index of the responsible host, it is possible to ***identify hosts that are engaged in intrusion activity.***”) (emphasis added).

In contrast, the ’593 patent’s “badness factor” is concerned with “undesirable” behavior or “misbehavior” associated with P2P traffic, which, unlike the host activity assigned a concern index value by Copeland, is ***not*** necessarily suspicious or non-suspicious. Ex. 1001 [’593 Patent] 1:10-18 (“[I]t has been estimated that P2P traffic now represents about 50-70 percent of the total traffic on the Internet. ... Thus, it appears that most of the bandwidth on the Internet is being consumed by just a minority of the users. For this and other reasons, ***P2P traffic is viewed*** by ISP’s (Internet service providers) and others ***as being abusive/misbehaving traffic*** that should be controlled and penalized.”) (emphasis added); *id.* at 2:18-21 (“Based at least partially upon the behavioral statistics, a determination is made as to whether the flow is exhibiting undesirable behavior. In one embodiment, this determination may be made by computing a badness factor for the flow.”). In short, Copeland’s “concern index” is concerned with

suspicious behavior of a host, not undesirable behavior of a flow. That is a different criterion than badness, a criterion which Copeland simply did not teach to the POSITA at the time of the claimed invention.

Moreover, Copeland's "concern index," unlike claim 9 and 29's "badness factor," is not computed on a per-flow basis. In Copeland, "[f]lows with suspicious activity are assigned a **predetermined concern index (CI)** value based upon a heuristically predetermined assessment of the significance of the threat of the particular traffic or flow or suspicious activity." Ex. 1007 [Copeland] 7:57-61 (emphasis added); *see also id.* at 8:1-5 ("By assigning a value to each flow that appears suspicious and **adding that value to a total CI of the host responsible for the flow**, it is possible to identify hosts that are engaged in intruder activities.") (emphasis added); *id.* at 10:46-47 ("[T]he engine **155** associates all packets with a flow. It analyzes certain statistical data and *assigns a concern index value to abnormal activity.*") (emphasis added); *id.* at 14:49-55 (a process includes a sequence of computer-executed steps "namely, the detection of intruders based upon C/S flows and other activity deemed heuristically to be a *threat substantial enough to warrant assignment of a concern index value.*") (emphasis added); *id.* at 17:58-61 ("These flows are considered as finished and a logic-tree analysis is done to classify them as either a normal flow, or a potential probe or other *suspicious activity warranting assignment of a concern index value.*") (emphasis added); *id.* at

Fig. 6 (assigning predetermined “concern index” values to categories of suspicious activity of potential intruders). Thus, Copeland only *assigns* “concern index” values to suspicious flows. In contrast, independent claims 9 and 29 of the ’593 patent recite computing a “badness factor” for *each* flow. [9.2; 29.2]. As the patent explains in its description of the invention:

the MFM **210** determines (block **304**) whether the flow is exhibiting undesirable behavior. In one embodiment, this determination is made by computing a badness factor for the flow. This badness factor is computed based on the behavioral statistics of the flow and provides an indication as to whether the flow is exhibiting undesirable behavior.

Ex. 1001 [’593 Patent] 6:25-31; *see also id.* at 7:51-52 (“[T]he MFM **210d** also computes a badness factor for the flow.”); *id.* at 8:12-17 (“By taking these components into account in the computation of the badness factor, it is possible to derive a badness factor that provides an indication of whether a flow is misbehaving. In one embodiment, a badness factor larger than 1 indicates a misbehaving flow.”). The ’593 patent’s “badness factor” is calculated for each flow regardless of whether the flow is misbehaving.

For all these reasons, Petitioner has failed to carry its burden to show by a preponderance of the evidence that Copeland teaches or suggests “computing ... a badness factor for the flow” [9.2; 29.2].

Accordingly, for this independently sufficient reason, ground 2 of the Petition fails.

B. The Petition Does Not Sufficiently Establish A Reason For The POSITA To Have Combined Yung And Copeland As Proposed.

Ground 2 must be rejected at trial for yet another reason. Petitioner fails to prove by a preponderance of the evidence a rationale to combine the references to meet the claimed invention.

The Petition asserts that claims 9-13, 19-24, 29-33, and 39-44 are obvious over Yung and Copeland. Pet., 43. It argues that a “POSA would have been motivated to incorporate Copeland’s flow-based CI value into Yung’s bandwidth-management device *based on Yung’s express disclosure.*” *Id.* at 45 (emphasis added). Petitioner cites Yung’s specification, arguing that it “provides exemplary application-behavior-pattern matching techniques and notes that ‘the application behavior pattern can incorporate other factors as well.’” *Id.* (citing Ex. 1005 [Yung] 10:43-58; 11:59-60). Based on this, Petitioner argues in conclusory fashion that a “POSA would have been motivated to seek out ‘other factors’ for classifying traffic” such as Copeland’s CI value. Pet., 45-46; *see also* Ex. 1003 [Jeffay Decl.] ¶ 196 (“Yung provides exemplary application-behavior-pattern-matching techniques but also notes that ‘the application behavior pattern can incorporate other factors as well.’ ... This would have motivated a POSA to seek

out these ‘other factors.’”) (emphasis added). In short, Petitioner argues that the POSITA’s alleged motivation to combine Yung and Copeland stems (entirely) from Yung’s statement that its “application behavior pattern can incorporate other factors as well.” *Id.* This was confirmed by Petitioner’s own expert at deposition. Ex. 2007 [Jeffay Transcript] 38:11-18.⁶

This generic nondisclosure in Yung does not disclose a motivation to make the proposed combination. Contrary to Petitioner’s argument, Copeland’s concern

⁶ The Institution Statement relied on a preliminary premise that is contrary to the evidence collected at trial. In granting institution and finding a reasonable likelihood of success as to ground 2, the Institution Decision preliminarily stated: “[a]lthough we agree that Yung’s reference to ‘other factors’ does not itself provide an express motivation to combine the references, *we disagree with Patent Owner’s assessment that Petitioner’s alleged motivation ‘stems (entirely) from [this] statement’ in Yung.*” Institution Decision, 46 (emphasis added). Cross-examination of Petitioner’s expert, however, confirmed that Patent Owner’s contrary explanation was and is correct. Petitioner’s alleged motivation to combine Yung and Copeland as proposed *does* “stem[] []entirely[]” from this statement in Yung. Ex. 2007 [Jeffay Transcript] 38:11-18.

index (CI) value is not a behavioral attribute of a flow that there is any preponderant evidence that the POSITA would have been motivated to combine with Yung. Copeland teaches that its mechanism

collects flow data *from packet headers* between two hosts or Internet Protocol (IP) addresses. *Collecting flow data from packet headers* associated with a single service where at least one port remains constant allows for more efficient analysis of the flow data. The collected flow data is analyzed to assign a concern index value to the flow based upon a probability that the flow was not normal for data communications.

Ex. 1007 [Copeland] 3:45-54 (emphases added). Copeland further teaches that “[b]y assigning a value to each flow that appears suspicious and adding that value to the total concern index of the responsible host, it is *possible to identify hosts* that are engaged in intrusion activity.” *Id.* at Abstract (emphasis added). In short, Copeland is directed to collecting self-reported flow information from packet headers to determine whether a host (e.g., a computer) is engaged in intrusion activity (e.g., attempting to take control of another computer or network).

As Petitioner does not dispute, Copeland stores in its flow data structure fields, such as “unsigned long bytes[2]; // bytes sent by ip[0] and ip[1]” and “unsigned long pkts[2]; // packets sent by ip[0] and ip[1].” Ex. 1007 [Copeland] 16:45-60; 15:50-55. But this information is obtained from packet headers, not flow-based behavioral statistics. Copeland’s CI value is thus reflective of packet

header information, not the behavior of a flow. At his deposition, Petitioner's expert confirmed that Copeland does not disclose collecting flow data from any source other than packet headers. Ex. 2007 [Jeffay Transcript] 40:19-41:10. Although Petitioner's expert testified in a conclusory fashion without any explanation that packet header information somehow represents behavioral statistics, under cross-examination he ultimately retreated from that initial position, testifying merely that "to the extent that someone felt that wasn't the case, I think a person of skill in the art would understand that there's nothing in Copeland to prevent you from using behavioral statistics." *Id.* at 42:12-43:3. Even assuming that this conclusory assertion is true, it does not help Petitioner, who has the burden to **establish** by a preponderance of the evidence that Copeland discloses the challenged limitation, not that "there's nothing in Copeland to **prevent** you from using behavioral statistics" (emphasis added).

In contrast, Yung is focused on traffic monitoring based on flow object behavioral data such as "packet count, byte count, first packet time, last packet time, etc." Ex. 1005 [Yung] 8:5-11. No reason is given for the POSITA to modify Yung in view of Copeland to store information from packet headers, which are not based on flow object behavioral data.

As a whole, and particularly as to their respective disclosures relied upon by Petitioner, Copeland and Yung are directed to two very different inventions.

Whereas Copeland discloses an invention directed toward “*identify[ing] hosts* that are engaged in intruder activity” by “collect[ing] flow data from packet headers between two hosts or Internet Protocol (IP) addresses” (Ex. 1007 [Copeland] 3:38-39; 3:45-47) (emphasis added), Yung discloses an invention directed toward “enhanced network traffic classification mechanisms that allow for *identification of encrypted data flows*, or data flows where attributes necessary to proper classification are otherwise obscured or unknown.” Ex. 1005 [Yung] 2:24-27 (emphasis added). The Petition does not address these differences between Yung and Copeland, and so cannot show that they do not defeat the alleged motivation to combine.

For all these reasons, the Petition fails to demonstrate by a preponderance of the evidence a reason for the POSITA to combine Yung and Copeland to meet the claims.

VI. PETITIONER FAILS TO SHOW BY A PREPONDERANCE OF THE EVIDENCE THAT THE FOUR-STEPS WHITEPAPER WAS PUBLICLY ACCESSIBLE QUALIFIED PRIOR ART (CLAIM 3, GROUND 3).

The Board was right to “question whether Petitioner introduced sufficient evidence to show that an ordinary artisan would have been able to locate the Four-Steps Whitepaper with reasonable diligence,” even under the extremely forgiving standard for sufficiency of evidence to support institution. Institution Decision, at

50. At the institution stage, Petitioner failed to introduce sufficient evidence to show that a POSITA would have been able to locate the Four-Steps Whitepaper with reasonable diligence prior to the priority date of the '593 patent. Nothing has changed since the Institution Decision. Petitioner has not shown and cannot show by the requisite preponderance of the evidence that a POSITA would have been able to locate the Four-Steps Whitepaper with reasonable diligence such that it would qualify as a printed publication for prior art purposes. *See Schlumberger Tech. Corp. v. Integrated Drive Sys. LLC*, IPR2018-00603, Paper 40, 11-12 (PTAB Sept. 3, 2019) (“Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable—including showing that the references relied upon are patents or printed publications.”) (citing 35 U.S.C. §§ 311(b), 316(e)). Because Petitioner has failed to meet its burden with respect to the Four-Steps Whitepaper, the Petition fails to demonstrate by a preponderance of the evidence that Petitioner should prevail on ground 3 which relies on that reference. *See Gracenote, Inc. v. Iceberg Indus. LLC*, IPR2013-00551, Paper 6, 32 (Feb. 28, 2014) (“Because we have determined that Petitioner fails to demonstrate a reasonable likelihood of prevailing in showing that Wang is a prior art reference under 35 U.S.C. § 102(e), we determine that Petitioner fails to demonstrate a reasonable likelihood of prevailing in its challenge”).

“Whether a reference qualifies as a ‘printed publication’ under 35 U.S.C. § 102(b) involves a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). “A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *Suffolk Techs., LLC v. AOL Inc.*, 752 F.3d 1358, 1364 (Fed. Cir. 2014) (emphasis omitted).

With respect to a reference stored on webpages in cyberspace, “[j]ust as indexing plays a significant role in evaluating whether a reference in a library is publicly accessible, ... indexing, ‘[w]hether ... through search engines or otherwise,’ ... is also an important question for determining if a reference stored on a given webpage in cyberspace is publicly accessible.” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1349 (Fed. Cir. 2016) (quoting *Voter Verified, Inc. v. Premier Election Sols., Inc.*, 698 F.3d 1374, 1380 (Fed. Cir. 2012)). Indexing and cataloging must be prepared in a “meaningful” way, i.e., in relationship to the subject matter of the references, to allow an interested researcher exercising reasonable diligence to locate the prior art. *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989). As the Federal Circuit noted in *Cronyn*, some way to search for

the reference based on the reference's subject matter must exist in order for indexing to be persuasive evidence of public accessibility. *Id.* Accordingly, the Board has held that a website is not proven to be publicly accessible by "Wayback Machine" evidence alone because searching the Internet Archive by URL generally "bears no relationship to the subject" of the reference. *Adobe Sys. Inc. v. Grecia*, IPR2018-00419, Paper 9, 10 (Sept. 7, 2018).

Accordingly, the Board has repeatedly found declarations from Mr. Butler and other employees of the Internet Archive insufficient, without more, to carry a petitioner's burden with respect to demonstrating the public accessibility of a reference. *See, e.g., Kingston Tech. Co., Inc. v. Memory Techs., LLC*, IPR2019-00654, Paper 9, 18–22 (Aug. 13, 2019); *Google LLC v. IPA Techs. Inc.*, IPR2018-00384, Paper 11, 13–15 (July 3, 2018); *Celltrion, LLC v. Biogen, Inc.*, IPR2017-01230, Paper 10, 11–16 (Oct 12, 2017). For example, in *Kingston*, even applying the forgiving "reasonable likelihood" standard, the Board denied institution because the petitioner had not sufficiently shown that a primary reference constituted a "printed publication." IPR2019-00654, Paper 9, 18–22. The petitioner argued the reference was a prior art "printed publication" because it bore a copyright date of May 2003, and allegedly—as asserted by an Affidavit of Christopher Butler, the Office Manager of the Internet Archive, similar to Petitioner's evidence here—was available for download on a particular website

[the MMCA website] by August 18, 2003. *Id.* at 19–20. The Board disagreed, holding that, even accepting those facts as true, the petitioner had failed to demonstrate the reference was publicly accessible as of that date. *Id.* at 21–22. The Board noted the petitioner “made no assertion or showing that the website of MMCA was sufficiently indexed such that it would be findable by an internet search engine.” *Id.* at 21. Additionally, the Board noted that the petitioner “d[id] not assert or provide evidence indicating that the [MMCA] or its website were well known to one with ordinary skill in the art, or that one with ordinary skill in the art would have otherwise been aware of, or directed to, the MMCA website to obtain MMC 3.31.” *Id.* at 22. As the Board explained, it was “incumbent” on the petitioner to explain in the petition how skilled artisans would have arrived at the MMCA website, but the petitioner had failed to do so. *Id.* The Board thus held the petitioner had “not sufficiently shown, [even] for the purposes of instituting review, that MMC 3.31 constitutes a ‘printed publication’ against the [subject] patent.” *Id.*

In *Google*, the Board likewise held that the archiving of a webpage by the Internet Archive failed to demonstrate even a reasonable likelihood of establishing, let alone show by a preponderance of evidence, that the petitioned art reference was publicly accessible prior to the date of archiving. IPR2018-00384, Paper 11, 13–15. The Board found that, even assuming the reference was “available online

(i.e., technical availability),” the petitioner “fail[ed] to point to any persuasive evidence of public accessibility to the document or [] website.” *Id.* at 15. In particular, applying the law established by *Blue Calypso*, the Board noted that, relative to the critical date, the petitioner “failed to present (1) any evidence that the reference was viewed or downloaded, (2) any testimony evidence that one of ordinary skill in the art would have been independently aware of the webpage, and (3) any evidence that a query of a search engine before the critical date, using any combination of search words, would have led to the reference appearing in the search results.” *Id.* at 14–15.

Likewise, in *Adobe Sys. Inc. v. Grecia*, IPR2018-00418, Paper 9 (Sept. 7, 2018), the Board, confirming a denial of institution on rehearing, found the fact “that the Internet Archive electronically archived a copy of [a reference] does not, by itself, mean that [the reference] was sufficiently indexed on the [underlying] website or the Internet Archive.” “Nor does it reveal anything about the search capabilities of the [] website or the Internet Archive, or why one with ordinary skill in the art would have even visited either website to find anything.” *Id.*, 9; *see id.*, IPR2018-00418, Paper 7, 11 (June 21, 2018) (“That the Internet Archive captured and archived a copy of [the reference] does not mean, by itself, that [the reference] was sufficiently indexed or catalogued Nor does it reveal anything about the search capabilities of the [] website.”). *See also Shenzhen Zhiyi Tech. Co. v.*

iRobot Corp., IPR2017-02133, Paper 8, 11 (Mar. 28, 2018) (“the fact that the Internet Archive was able to access a document does not establish, without more, that the document was publicly accessible through traditional search engines, like Google or Yahoo, merely that it was accessible to the Internet Archive.”).

The Board’s decision denying *inter partes* review in *Laird Techs., Inc. v. A.K. Stamping Co. Inc.*, IPR2017-02038, Paper 6, 11-12 (Mar. 14, 2018), is likewise instructive here. There, a reference cited by the petitioner as alleged prior art contained “the logo of ‘Laird Technologies’ and the web address of www.lairdtech.com.” *Id.* at 11. The Board explained that even if it were to assume the reference was available online on the “lairdtech.com” website that did not establish public accessibility because “there [wa]s no testimonial evidence that a person interested in ... the content relied upon for the Petitioner’s asserted challenges, would be independently aware of the web address of www.lairdtech.com as it appears on the front page of Laird.” *Id.* at 12. The Board also stated “there [wa]s no evidence presented to support that the site had a search function which would allow one of ordinary skill in the art to find the Laird document with reasonable diligence once on the site. In other words, Petitioner d[id] not provide sufficient evidence that an ordinarily skilled artisan would have known about the “lairdtech.com” website or its web address. Nor d[id] Petitioner provide evidence that the website and/or the Laird document would have been

accessible through routine internet searches.” *Id.* Accordingly, the presence of the website address on the reference did not establish the reference was sufficiently accessible to the public to constitute a printed publication within the meaning of 35 U.S.C. § 102(b). *See id.*

Coalition for Affordable Drugs VIII, LLC v. Trustees of the University of Pennsylvania, IPR2015-01836, Paper 58 (PTAB Mar. 6, 2017), is also on point. There, in a final written decision, the PTAB found that the Petitioner failed to demonstrate by a preponderance of the evidence that the challenged claims of the at-issue patent were unpatentable. As relevant here, the PTAB found that the petitioner had not met its burden to show that a set of slides supposedly authenticated by an affidavit of Christopher Butler of the Internet Archives was a printed publication for prior art purposes. Mr. Butler’s affidavit contained a screenshot from the “Wayback Machine” showing a hyperlink to the slides that purportedly would have appeared on a website in April 2004. However, “there [wa]s no evidence as to what was at the hyperlink in 2004, and the hyperlink is defunct.” *Id.* at 21. The PTAB concluded “that Petitioner ha[d] not met its burden of demonstrating by a preponderance of the evidence that the Stein slides constitute a printed publication.” *Id.* at 22. *Coalition for Affordable Drugs* thus stands for the proposition that where, as here, a petitioner is relying on a document located through the use of the Wayback Machine as prior art, the petitioner has the

burden to show that a POSITA would have navigated to a webpage with a hyperlink to the document and the hyperlink would have worked such that the POSITA would have retrieved the document.

Under these legal principles, and as this Board preliminarily found, Petitioner has failed to establish the Four-Steps Whitepaper was publicly accessible prior to the December 22, 2004 priority date of the '593 patent. With its Petition, Petitioner submitted Ex. 1006A [Four-Steps], an Affidavit of Elizabeth Rosenberg, a Records Request Processor at the Internet Archive, along with Exhibit A, a copy of the Four-Steps Whitepaper with a coversheet containing the following URL: https://web.archive.org/web/20030317051910/http://packeteer.com/PDF_files/4steps.pdf. Without proving Ms. Rosenberg's unavailability as a witness, and over Patent Owner's objection, Petitioner was permitted to substitute the Declaration of Christopher Butler for that of Ms. Rosenberg. Even aside from the procedural impropriety⁷ of allowing Petitioner to

⁷ See, e.g., *OpenSky Indus., LLC v. VLSI Tech. LLC*, IPR2021-01064, Paper 17, 5 (Dec. 23, 2021) ("Patent Owner argues that Petitioner relies on expert declarations filed by Intel in another proceeding. Accordingly, unless cross-

examination is available, those declarations are hearsay in this proceeding.”). So too here. Petitioner filed Ex. 1006A with its Petition on May 7, 2021. However, the Rosenberg Declaration has a date of August 17, 2020—even before the district court litigation was filed against Petitioner on March 15, 2021. That is because the Rosenberg Declaration was prepared for and filed in a different IPR proceeding which was subsequently terminated—*Palo Alto Networks v. Sable Networks, Inc.*, IPR2020-01712, Paper 6, EX1006 [Affidavit of Elizabeth Rosenberg dated August 17, 2020, along with Exhibit A, a copy of the Four-Steps Whitepaper] (Oct. 2, 2020). It is apparent that Petitioner simply copied and submitted the previously filed Rosenberg Declaration without inquiring as to Ms. Rosenberg’s availability. Patent Owner should not suffer prejudice due to Petitioner’s procedural misstep. Moreover, Petitioner did not even establish Ms. Rosenberg’s unavailability as a witness within the technical definition of the term. Under Federal Rule of Evidence 802(a), there are specific criteria that must be met for a witness to be considered unavailable. Fed. R. Evid. 802(a). For example, a witness is unavailable if she “cannot be present or testify at the trial or hearing because of death of a then-existing infirmity, physical illness, or mental illness.” *Id.*

substitute one witness's testimony for that of another at this stage of the proceeding, the Butler Declaration fares no better than the Rosenberg Declaration; it, too, fails to establish that the Four-Steps Whitepaper was publicly available for prior art purposes.

Mr. Butler states "Exhibit A are true and accurate copies of browser printouts of the Internet Archive's records of the archived files for the URLs and the dates specified in the footer of the printout or an attached coversheet (in the case of records for which a browser does not provide a ready option to print a URL in the footer, e.g., in the case of a PDF file)." Ex. 1006B [substituted Four-Steps] i-ii. Petitioner argues the URL "reflect[s] that the publication was archived from the Packeteer website on March 17, 2003." Pet., 16 (citing Ex. 1006 [original Four-Steps] iv).

802(a)(4). The fact that Ms. Rosenberg apparently was promoted to a Donations Manager of the Internet Archive certainly does not make her unavailable as a witness within Federal Rule of Evidence 802(a)(4), or any of the other definitions set forth in the Rule. *See id.* 802(a)(1-5). There was no proper procedural basis for Petitioner to substitute Mr. Butler's testimony for Ms. Rosenberg's testimony without any showing of Ms. Rosenberg's unavailability.

This is insufficient to demonstrate public availability by a preponderance of evidence. Even assuming, *arguendo*, it is all true, the fact Internet Archive may have electronically archived a copy of the Four-Steps Whitepaper on March 17, 2003 “does not, by itself, mean that [the Four-Steps Whitepaper] was sufficiently indexed on the [underlying] website or the Internet Archive. Nor does it reveal anything about the search capabilities of the [] website or the Internet Archive, or why one with ordinary skill in the art would have even visited either website to find anything.” That is so even under the more forgiving standard of proof for institution, let alone the heightened standard applicable to IPR trials. *E.g.*, *Adobe Sys.*, IPR2018-00418, Paper 9, 9; *see Shenzhen Zhiyi Tech.*, IPR2017-02133, Paper 8, 11 (“the fact that the Internet Archive was able to access a document does not establish, without more, that the document was publicly accessible through traditional search engines, like Google or Yahoo, merely that it was accessible to the Internet Archive.”).

Indeed, Petitioner has submitted nothing more than the *pro forma* Butler Declaration to allegedly establish the public accessibility of the Four-Steps Whitepaper. Petitioner has not submitted “(1) any evidence that the reference was viewed or downloaded, (2) any testimony evidence that one of ordinary skill in the art would have been independently aware of the webpage, [or] (3) any evidence that a query of a search engine before the critical date, using any combination of

search words, would have led to the reference appearing in the search results.”

Google, IPR2018-00384, Paper 11, 14-15.

Accordingly, as this Board panel already noted in the Institution Decision, Petitioner’s evidence is not enough. *See* Institution Decision, 51-52. As the panel rightly explained, “even if we assume that an ordinary artisan was aware of the company (Packeteer) and its website,” an assumption Patent Owner challenges and that has not been substantiated, as discussed below, “we query whether the Petition sufficiently shows that an ordinary artisan would have been able to locate the Four-Steps Whitepaper on that website with reasonable diligence.” *Id.* at 51. The panel appropriately keyed in on the fact that Petitioner did not even attempt to argue in the Petition that “Packeteer’s website included an index or search function that would have allowed an ordinary artisan to find this particular Whitepaper.” *Id.*

Even assuming, for the sake of argument only, that Petitioner could appropriately introduce entirely new evidence and arguments on Reply to address the fatal infirmities in its Petition, which it should not since all the deficiencies in Petitioner’s showing were foreseeable from the very onset of Petitioners’ development of its grounds, there would be no point in doing so here. Indeed, as set forth in the Declaration of Erin McCracken (Ex. 2008), on the date the Internet Archive electronically archived a copy of the Four-Steps Whitepaper (March 17, 2003), the Packeteer.com website itself was not electronically archived. Ex. 2008

[McCracken Decl.] ¶ 5 (Packeteer.com was only archived on March 21 and 27 in March 2003; it was not archived on March 17, 2003). As a result, there is no way for Petitioner to show, as it had the burden to do, that on March 17, 2003, a POSITA could have navigated to the Packeteer.com website and located the Four-Steps Whitepaper with reasonable diligence. *See Elec. Frontier Found. v. Pers. Audio, LLC*, IPR2014-00070, Paper 21, 22 (April 18, 2014) (finding that a reference was not publicly available where “Petitioner’s evidence show[ed] the earliest existing copy of the GotW, located using the ‘Wayback Machine,’ is dated December 20, 1996. Petitioner fail[ed] to provide any evidence that the GotW document ... could be found anywhere other than directly through the URL.”).

Moreover, it appears that March 17, 2003 is the only date on which the Internet Archive has archived the version of the Four-Steps Whitepaper on which Petitioner relies. Ex. 2008 [McCracken Decl.] ¶¶ 6-7. Based on this date, the Four-Steps Whitepaper cannot be deemed a printed publication for prior art purposes. Ground 3 of the Petition therefore fails.

There is no way for Petitioner to show by the requisite preponderance of the evidence that prior to the priority date of the ’593 patent, the POSITA “could or would have taken [steps] to find ... [the Four-Steps White Paper] where it was located on ... [Packeteer’s] website” *See Schlumberger Tech.*, Paper 40, 17 (final written decision finding that a declaration from Christopher Butler stating

that a reference was available on the internet on a certain date did not establish the public accessibility of the reference such that it did not qualify as a printed publication for prior art purposes).

In addition to all of the above, Petitioner has not shown this document was *ever intended* to be freely available to the public. As the Board correctly pointed out in the Institution Decision, the Four-Steps White Paper on which Petitioner relies states on its first page “that it may not be copied or downloaded without Packeteer’s ‘express written consent’” Institution Decision, 52. As the Board explained, this sort of statement further “cast[s] doubt on whether Packeteer made this document available to the public.” *Id.* Indeed, the Board has previously found that a datasheet was not publicly available, relying in part on a copyright statement restricting dissemination: “This book or any part or parts thereof, must not be reproduced in any form without permission of the copyright owner.” *Power Integrations, Inc. v. Semiconductor Components Indus., LLC*, IPR2017-01975, Paper 9, 14 (Mar. 12, 2018) (denying institution of *inter partes* review). Without any testimony from a Packeteer employee with personal knowledge of the Four-Steps Whitepaper and whether it was made available to the public during the relevant time period, the only evidence in the record is the explicit statement on the first page of the Whitepaper evidencing that its dissemination was restricted. For

this reason too, Petitioner has not shown and cannot show that the Four-Steps Whitepaper qualifies as a printed publication for prior art purposes.

In the Petition, Petitioner further asserts, based on hearsay, that “Packeteer was a publicly traded company and a known leader in this industry.” Pet., at 16. To support its assertion, Petitioner relies on Exhibit 1031, a “PacketShaper Family Datasheet” which states that “Seventy-four percent of the world’s largest companies rely on Packeteer® innovation to solve their WAN application performance problems.” Ex. 1031. Although Petitioner’s expert also claims that “Packeteer was an industry leader,” he too relied on Ex. 1031, a 2006 document, for that proposition. Ex. 2007 [Jeffay Transcript] 45:18-46:10. Likewise, Petitioner’s expert states that “seventy-four percent of the world’s largest companies rely on Packeteer® innovation to solve their WAN application performance problems.” Ex. 1003 [Jeffay Declaration] ¶ 42. But Petitioner again relies on Ex. 1001 for that proposition. *Id.* See also Ex. 2007 [Jeffay Transcript] 46:22-47:7. However, as the Board already noted in the Institution Decision, Exhibit 1031 bears a copyright date of 2006—three years after the priority date of the ’593 patent, and so does not demonstrate public availability of the cited art before the patent’s priority date. See Institution Decision, 51 (“[T]his exhibit includes a 2006 copyright date, which causes us to question whether Packeteer was known to an ordinary artisan in the relevant timeframe.”) (citations omitted).

Finally, Petitioner’s reliance on Exhibit 1032 to establish the alleged public accessibility of the Four-Steps Whitepaper also fails. Exhibit 1032 is offered to allegedly show that the “Four-Steps Whitepaper provides a product overview for the PacketShaper®, which was a product of Packeteer known to a POSITA during the relevant timeframe, and Yung is a Packeteer patent.” Pet., 62. But Exhibit 1032 on its face references a different version of the Four-Steps Whitepaper than the reference that was submitted by Petitioner as Exhibit 1006. *See* Ex. 1032 [Boniforti] 8 (stating that “A partition ‘...creates a virtual separate pipe for a traffic class’ (Four Steps Packeteer, p. 5).”) Page 5 of Exhibit 1006 submitted by Petitioner as the Four-Steps Whitepaper does not contain this phrase, so Exhibit 1032 is quoting an unknown document that is not the same as the Four-Steps Whitepaper. Accordingly, as the Board already noted in the Institution Decision, and “as Patent Owner observes, the referenced paper [in Exhibit 1032] appears to be a different document. Specifically, the URL for the introductory paper and the Four-Steps Whitepaper are different ... , and at least one quote is different” Institution Decision, 51 (citations omitted). Moreover, Exhibit 1032 itself is a “Global Information Assurance Certification Paper” which states on its first page: “Copyright SANS Institute Autor Retains Full Rights This paper is taken from the GIAC directory of certified professionals. Reposting is not permitted without express written permission.” Ex. 1032, 1. Accessing this paper required a paid

subscription to the SANS Institute and/or GIAC Certifications. As a result, Exhibit 1032, which references a different unknown version of the Four-Steps Whitepaper, and was itself not a publicly available document, does not aid Petitioner in establishing the public availability of the Whitepaper.

Accordingly, Petitioner has failed to carry its burden to show by a preponderance the evidence that the Four-Steps Whitepaper was publicly accessible qualified prior art. Ground 3 of the Petition which relies on the Four-Steps Whitepaper therefore fails.

VII. CONCLUSION

For at least the foregoing reasons, the Board should deny the Petition and confirm the patentability of the challenged claims.

Respectfully submitted,

/ Kenneth J. Weatherwax /
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Date: March 14, 2022

Case IPR2021-00909
U.S. Pat. No. 8,243,593

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Patent Owner Response (the “POR”) consists of 10,313 words, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The POR complies with the type-volume limitation of 14,000 words as mandated in 37 C.F.R. § 42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

Respectfully submitted,

/ Colette Woo /

Date: March 14, 2022

Case IPR2021-00909
U.S. Pat. No. 8,243,593

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following documents were served
by electronic service, on the date signed below:

PATENT OWNER'S RESPONSE

EXHIBITS 2007-2009

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